CTS Advisory Council

Office 365 Tenant Design

July 2014

What We Said

Opportunity

- Microsoft is presenting a licensing option that offers attractive pricing for subscription-based licensing in the Cloud even if you don’t use Office 365 cloud-based applications
- Once deployed, these licenses must be activated in the Cloud and re-activated every 30 days
- Managing license activation can be labor intensive without the use of:
  - A **sync engine** (DirSync or FIM) to automate creation and maintenance of tenant accounts
  - An **authentication engine** (ADFS) to eliminate need to re-enter credentials for license authentication

CTS Response

To meet customer needs for O365 license activation, CTS will provision:

- A single shared tenant
- A process for managing the shared pool of licenses
- A single synchronization engine using Forefront Identity Manager (FIM)
- A single authentication connection using Active Directory Federation Services (ADFS)

Alternatives Considered

Multiple Cloud Tenants Distributed License Administration	Shared Cloud Tenant Central License Administration
1 Customers provision separate O365 tenants, manually import EAD data, manually administer licenses CTS provisions multiple ADFS connections, one for each tenant	**3** CTS provisions a shared Statewide tenant with one DirSync and one ADFS connector
2 Customers provision separate O365 tenants CTS provisions multiple DirSync connections and multiple ADFS connections, one for each tenant	**4** CTS provisions a shared Statewide tenant with Forefront Identity Manager (FIM) and one ADFS connector

Multiple vs Shared Tenant

- Multiple tenants, one per agency
  - Higher operational maintenance cost
    - Multiple DirSync/FIM and ADFS connections, one per tenant
    - Must be undone if state moves to O365 services
  - Agency manages their own licenses
- Shared tenant
  - Lower operational maintenance cost
    - One DirSync/FIM and ADFS connection
  - CTS manages a shared license pool
    - Creates a need to establish license management processes

DirSync vs FIM

- Both products
  - Require enterprise administration rights to install and manage (and thus CTS involvement)
  - Require review and remediation of EAD attributes needed for synchronization
- DirSync
  - Is “free” and will require some infrastructure to implement
  - Does not filter content (syncs all 190 EAD attributes)
- FIM
  - Is a purchased product and will require more infrastructure to implement
  - FIM filters content (5 required EAD attributes)

CTS Direction

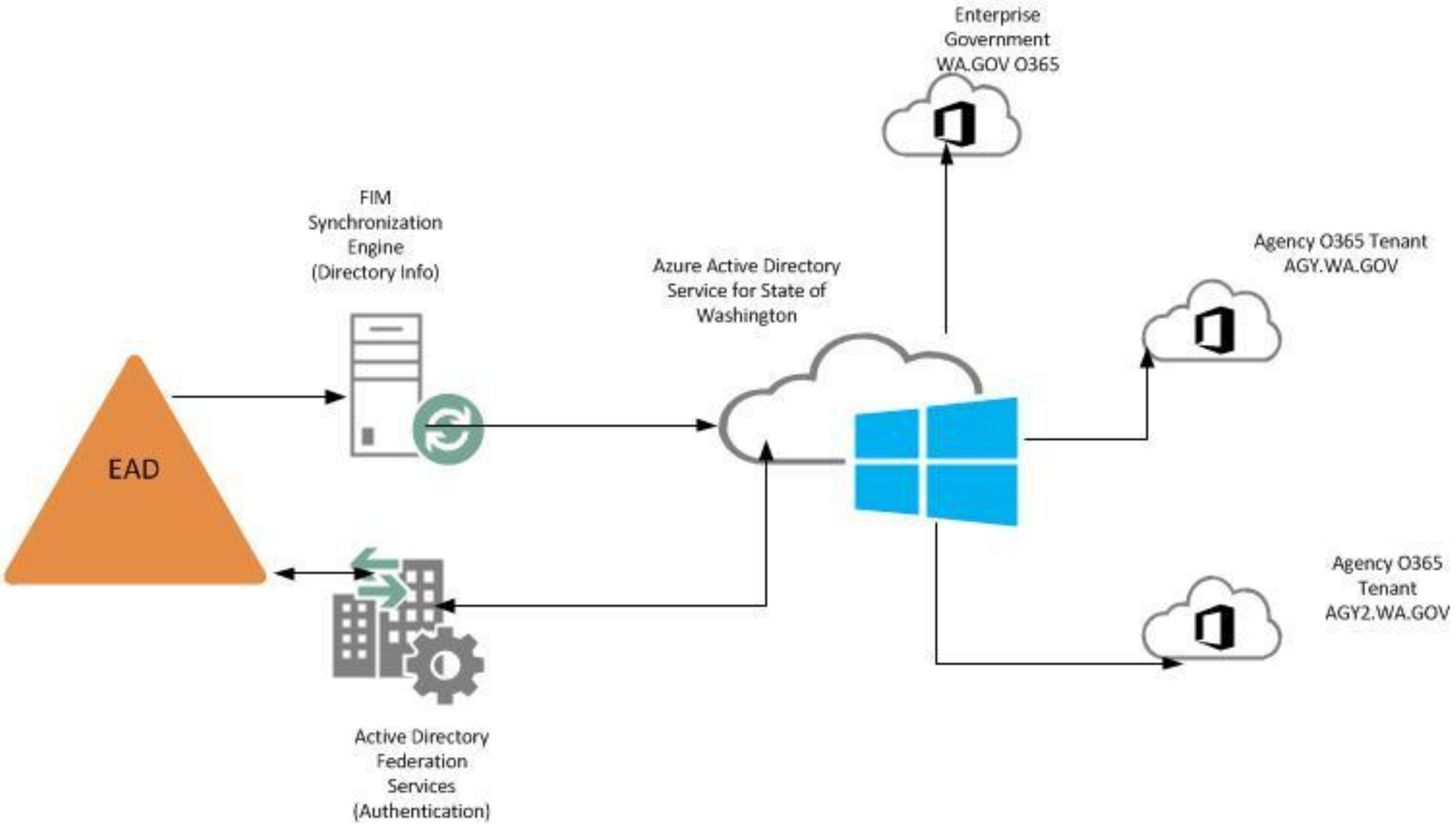
- If customers pursue the purchasing of O365 licenses, CTS will provision:
  - A single shared tenant
  - A single synchronization engine - FIM
  - A single authentication connection – ADFS
  - A process for managing the shared pool of licenses

Update

Challenges

- Agencies who have purchased O365 licenses are keenly interested in using the SharePoint service
- Use of a single, shared tenant means CTS would have to be responsible for all O365 SharePoint administration including creating and maintaining site collections and managing storage
- Research into options for managing a shared license pool has not reveal promising solutions
- Microsoft cloud Identity Management services are evolving as we work on this project

O365 Multi-Tenant Design


Enterprise Government WA.GOV O365
FIM Synchronization Engine (Directory Info)
Azure Active Directory Service for State of Washington
Agency O365 Tenant AGY.WA.GOV
EAD
Agency O365 Tenant AGY2.WA.GOV
Active Directory Federation Services (Authentication)

How This Will Work

- CTS will manage one instance in Azure Active Directory (AAD) for the state (wa.gov)
- CTS will manage one connection between Enterprise Active Directory (EAD) and AAD to provide directory synchronization (FIM) and authentication (ADFS)
- Each agency will work with Microsoft and CTS to establish an affiliate tenant for their subdomain (agy.wa.gov) federated with the wa.gov instance
- Agencies administer their affiliate tenant, including their own licenses

How This Will Work

- Synchronization of Exchange and Lync attributes will be restricted until, and if, these enterprise services move to the enterprise tenant
- Affiliate tenants are limited to their own subdomain namespace – they will have no access to the GAL or other agency directory information
- If an agency chooses to turn on these services in their own tenant, these will be isolated to their own namespace – again, no GAL
- This approach does not represent additional cost to O365 license purchasers

Beyond This Project

- Azure Active Directory Premium offers features that align with our planned Identity Management initiative – self-service password reset, group-based access management and provisioning, multi-factor authentication…
- CTS has begun conceptual design discussions with Microsoft to better understand this cloud-based service and its usefulness